

Title (en)
Mould pipe

Title (de)
Kokillenrohr

Title (fr)
Tube pour lingotière

Publication
EP 1332811 B1 20071024 (DE)

Application
EP 03000356 A 20030109

Priority
DE 10203967 A 20020131

Abstract (en)
[origin: EP1332811A2] Molding tube has a double T-shaped inner and outer cross-section in a beam-blank format surrounded by a water-deviating casing (12) fitting the outer contour and forming a water gap (14). The wall thickness of the molding tube is dimensioned by central bars (4) on a slanted flange (5). Preferred Features: The wall thickness is reduced in transition regions (2) only at the height of the bath meniscus. Recesses (8) are provided on the outer side of the transition regions. Several grooves are provided on the outer side of the transition regions. Bores are provided in the wall sections of the transition regions.

IPC 8 full level
B22D 11/041 (2006.01); **B22D 11/00** (2006.01); **B22D 11/04** (2006.01)

CPC (source: EP KR US)
B22D 11/04 (2013.01 - KR); **B22D 11/0406** (2013.01 - EP US)

Cited by
WO2013000555A3

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)
DE 20219419 U1 20030403; AT E376465 T1 20071115; BR 0300258 A 20030909; CA 2415517 A1 20030731; CA 2415517 C 20100223; CN 1248802 C 20060405; CN 1436622 A 20030820; DE 10203967 A1 20030814; DE 50308443 D1 20071206; DK 1332811 T3 20080218; EP 1332811 A2 20030806; EP 1332811 A3 20030820; EP 1332811 B1 20071024; ES 2291549 T3 20080301; JP 2003225741 A 20030812; KR 20030065403 A 20030806; MX PA03000876 A 20050214; PT 1332811 E 20071113; RU 2304485 C2 20070820; TW 200302758 A 20030816; TW I259114 B 20060801; US 2003141430 A1 20030731; US 2005028960 A1 20050210; US 7198092 B2 20070403

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